Epilepsy 1811
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Allen McLane

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Observations on the Phenomena and Cure of Epilepsy

By Allen McLane Junr.
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True it is that the science of Medicine has been much indebted to accident for many of its improvements. But it is no less certain that the most successful uniform practice has been founded on a preconceived Theory.

The importance which has uniformly been attached to Theory is shown in the reluctance with which men give up an old and favourite opinion. So inviolate as these attachments have been considered, they should be examined, and if found defective new ones should be substituted. Errors in Medicine like errors in Government should be exploded, and the Antiquity of an opinion alone should not entitle it to

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From the want of success attending the practice in Epilepsy, it has hitherto been considered the opprobrium Medicorum." If at any time a new remedy for Epilepsy ~~has~~ is made known, which has been used with success it is tried by practitioners who are too indolent to think or reason for themselves in the first case that offers itself. The result most generally is that it fails entirely or falls farshort of the expectations which had been raised of its efficacy. The patient is disappointed and the Physician wonders at his failure. The imperfection if not the uncertainty of the science is criminated, and his conscience acquits his judgement of that for which it alone should suffer.

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Such must of course continue to be the case whilst the nature of the disease remains uninvestigated. In the following inquiry I propose considering the phenomena and nature of this disease, together with its causes and mode of cure.

Epilepsy has been defined to consist in convulsions of the greater part of the muscles of voluntary motion, attended with a loss of sense and ending in a state of insensibility and seeming sleep.

To this definition I object, because 1st from it we would be led to believe that there was but one form of this disease, whereas I hope to show hereafter that there are many. 2dly The same state of the system universally obtaining the same remedies must be uniformly

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administered for the name of the disease, but experience in this case joining hands with reason has shown that medicines of a very opposite character have at different times been found successful —

This disease has been distinguished according to the remote cause, into different species — that this distinction should be correct and perfect, it appears necessary, that the same cause should invariably produce the same effect, which the Protean form appearance of this disease shows us is not always the case —

In entering upon this subject I shall lay down a few propositions, which may render the following observations more intelligable —

1st Epilepsy is a disease of the Brain, also

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2dly It most frequently affects persons of nervous and muscular predispositions hence women and children are more subject to this disease than men; the latter on account of the superior strength of their arteries, and their irritability being disproportioned to their sensibility. The peculiar susceptibility of this disease which belongs to the female constitution, may depend upon that quality of matter which has happily been called Motility —

3dly The system being weakest at night the disease most frequently attacks at this time. Those frequent startings in our sleep are nothing more than slight convulsions, and these I hope to show are inferior grades of Epilepsy —

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4th Epilepsy has been considered an hereditary disease, but it possibly can be so only in this respect, that it may arise from the propagation of a similar predisposition from parent to child. It is a congenial and filial disease.

5th It is always induced by predisposing debility; and this debility is seated in the brain nerves and muscles. But from the superior strength which the brain possess, it is enabled to react when oppressed, and thus resist impressions which might otherwise produce extravasation or intravasation and consequent death. In this reaction I conceive Epilepsy consists, which is nothing more than chronic convulsions. We have an ephemeral fever and a chronic fever, and why not an ephemeral and chronic convulsion? There is no more difficulty in accounting

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for the periodical returns of this disease, than those of a common Intermittent fever; and probably the reason why Epilepsy does not kill so soon as an Intermittent is, that the latter is seated primarily in the bloodvessels, and more apt to produce disorganization - As it respects its difficulty of cure, we may observe that before the discovery of the peruvian bark, the Intermittent was as far beyond the power of Medicine as Epilepsy is at this time -

In this theory of Epilepsy we have another proof of the Unity of disease. We see at once the analogy between Apoplexy and Epilepsy. viz: that the first is disease suffocated in the brain, and the last, morbid action diffused through the brain nerves and muscles -

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The similarity of those two affections is supported not only by the doctrine of the Unity of disease, but the following considerations appear to substantiate its truth –

8th They are produced by a greater or less force of the same remote and exciting causes. This is evident from the convulsions and Apoplexies of children, arising from dentition and other causes – that children are affected with Apoplexy is rendered very probable if not certain, from the sudden manner in which they frequently die, which is generally attributed to their being overlaid, and reasoning a priori the large and disproportioned size of their heads would lead to this conclusion. We see the same cause producing in different constitutions, sudden death in

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2dly They affect the same systems; but with this difference, that morbid action is more diffused in one case than in the other, and consequently the systems are more able to react, and thus prevent suffocation and death —

3dly They are sometimes combined with each other, as appears from the phenomena exhibited in drunkenness. They also alternate with each other and Apoplexy terminates in Epilepsy, and the contrary for we have shown that Epilepsy kills frequently in this way.

4th They afford the same appearances upon dissection, differing only in degree —

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Having pointed out the similarity between those two forms of disease, I proceed to state that Epilepsy has several grades; the highest and lowest of which I shall now mention, the intermediate ones may be known when they occur by being modifications of those two –

The paroxism of the first and highest is so severe and general as sometimes to produce an emission of semen masculinum; and an effusion of blood through the arterial extremities under the skin which shows the the disease to be deep seated. Dr Rush relates the case of a Lady in whom a fit of this disease was so violent, as to render the patient insensible to the pains of parturition. In this grade of the disease, the Mind and body are completely prostrated –

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The slightest and most simple form of this disease, consists in feeble convulsions of the muscles of the face and eyes.

The causes which produce this disease are numerous, for a particular detail of them I shall refer you to the various practical writers on this subject, only observing at this time that they may be divided into five general heads. Into corporeal and mental, local and general and those that act sympathetically.

Before proceeding to the method of cure, I shall mention some of the Phenomena of this disease, altho' they may have no particular bearing at this time, may lead to a more successful practice, at some future period.

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This disease frequently continues with very little variation till about the 50th year of life, when it goes off spontaneously or ends in Apoplexy. It attacks at different intervals from those of four hours to those of six months. It affects the memory and Imagination, and even the Moral Faculty has not escaped its ravages. It appears to increase the powers of the Intellectual Faculties, for it is an extraordinary fact that three of the most remarkable men that have ever lived, have been subject to this disease. Mahomet and Cesar have experienced its effects, and Bonaparte that scourge of Europe and Traitor to humanity, now feels its convulsive power.

When the nature of the mind and of this disease are better understood this fact may

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When the disease has arisen from a blow or contusion, it sometimes has not made its appearance for some months after the accident, in one case not till 18 had elapsed. The fits are sometimes renewed by slight impressions. The association of Ideas and even the association of motions without Ideas have been known to reproduce them —

In speaking of the method of cure, I shall mention that it has been cured by puberty, by pregnancy and parturition; by a change of climate and a camp life — A long journey; madness with which it sometimes alternates, old age and dropsy have all been known to cure —

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The remedies which the nature of the disease appears to require, and those which experience has shown to be useful, naturally divide themselves into those 1st which are proper for its forming state. 2dly those for the paroxism. and 3dly those to be employed in the interval of the fits, to prevent their return —

The forming state of this disease may be known by the following symptoms: A bitter taste in the mouth, enlargement of the pupil; tremors of the body, false vision, sudden startings, glistening of the eye ball, a tense or slow pulse, a peculiar smell in the breath, costiveness, redness of the face, trembling of the under lip, Aura Epileptica, and preternatural elevation of the Faculties of

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the mind — The remedies for this state are 1st

1st Blood letting, if the pulse is tense or preternaturally full — 2ds An Emetic. Dr Barton has used for this purpose large doses of white vitriol, with the happiest effects. 3ds Abstinence has prevented an expected paroxism. 4th Purges. This remedy has been highly spoken of and much praised by Dr Hamilton. Sulphur has been recommended as a purgative in this case — The smell of burning Sulphur, holding salt in the mouth, the application of tobacco to the stomach. Ligatures to the wrists, when the convulsion appears in the fingers; friction to the head, also pouring cold water on the head, have all prevented a fit or lessened its force

Dr Rush advises wakefulness for two or

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three nights together in the forming state of this disease. the object of this advice will appear evident, when we refer to the state of the system during sleep, and its consequent susceptibility of an attack of the disease.

The remedies to be used during the paroxism are few. They are intended merely to prevent the disease from killing. blood: letting should be used to save the brain and prevent death – Fresh air should be admitted freely, which may be done by hoisting the windows and requesting all unnecessary attendants to withdraw – All ligatures and bandages should be loosened. The head should be elevated to prevent the determination of blood to the brain –

The remedies for the intervals are

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divided into those which should be used when the system is above the bar of excitement, and into those to be administered when it is below — of those that belong to the first class.

The 1st is bloodletting. As we have mentioned that excitement in this disease is seated in the brain, nerves and muscles, this remedy may act by lessening the natural excitement of the bloodvessels, and leaving them in a craving state; or by removing the stimulus of distention destroy one cause of the increased irritability of those parts.

2dly A diet altogether of milk. This must be continued in for a great length of time. The efficacy of this remedy has been evinced in other chronic inflammatory diseases ——

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3dly A salivation. In order to be effectual it should be kept up for a considerable time. It acts in two ways, 1st By the discharge of saliva which it causes and 2d By the abstinence which is necessarily connected with it —

4th Sleeping in a sitting posture, this has been found a most useful auxiliary to the other remedies. It should never be neglected in prescribing for this disease.

5th The sugar of Lead. I have been induced to class it has a sedative, from considering the nature of the cases in which it has been used; and also from some experiments which are related by the learned Professor of the Materia Medica, which were made with it and common salt —

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salt. It was found uniformly to destroy the irritation and spasm produced by the application of a solution of the muriate of soda to the muscles of a frog. Dr Rush has found it principally of service in the Epilepsies of Children. In these cases it has generally been used in combination with opium.

The second class of remedies are called Tonics, under this head I arrange those medicines also which are generally considered as Stimulants and Antispasmodics. They may be divided into Vegetable and Mineral. Of the first the following are the principle

Stramonium. Opium. Henbane. Musk
Belladonna. Camphor. Asafoetida. Valerian.

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Misletoe. Peruvian Bark. oil of Amber.

To the second class belong the preparations of Copper. of Zinc. of Iron. the Nitrate of Silver. Arsenic. Bismuth. Tin has been of late much praised by some writers. It must be given in large doses. Dr. Monroe thinks it peculiarly useful in those Epilepsies arising from worms. A generous diet has been found very useful in certain stages of this disease. Hard Labour has been used with great benefit.

Setons, Issues and Blisters have all been used in this disease, of these blisters are probably the most efficacious. They should be applied to the extremities of the body. What would be the effect of covering the whole body with a blister, and at the

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same time producing an artificial diarrhoea? The disease having once been cured by a universal blister favours the first, and the principle of translating the disease from the part affected, to a sound part and to one of less importance to life, will preserve the latter part of the query at least from ridicule.

From a consideration of what has been said of the remedies in this disease, the indications of cure appear to be the following. 1st Remove all remote and exciting causes.

2dly Find out the ~~remote~~ grade of the disease and regulate the remedies accordingly.

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near a par of excitement as possible, which may be done by combining the different remedies which have been mentioned in such away as they may act upon the different systems.

4th Transplate the disease to a distant part and to one less essential to life.

This Gentlemen have I laid before you the principle observations relative to the nature and cure of Epilepsy. I am conscious of the many imperfections with which it abounds. Circumstances entirely beyond my controul have prevented me from presenting it in as perfect a form as I otherwise might, or

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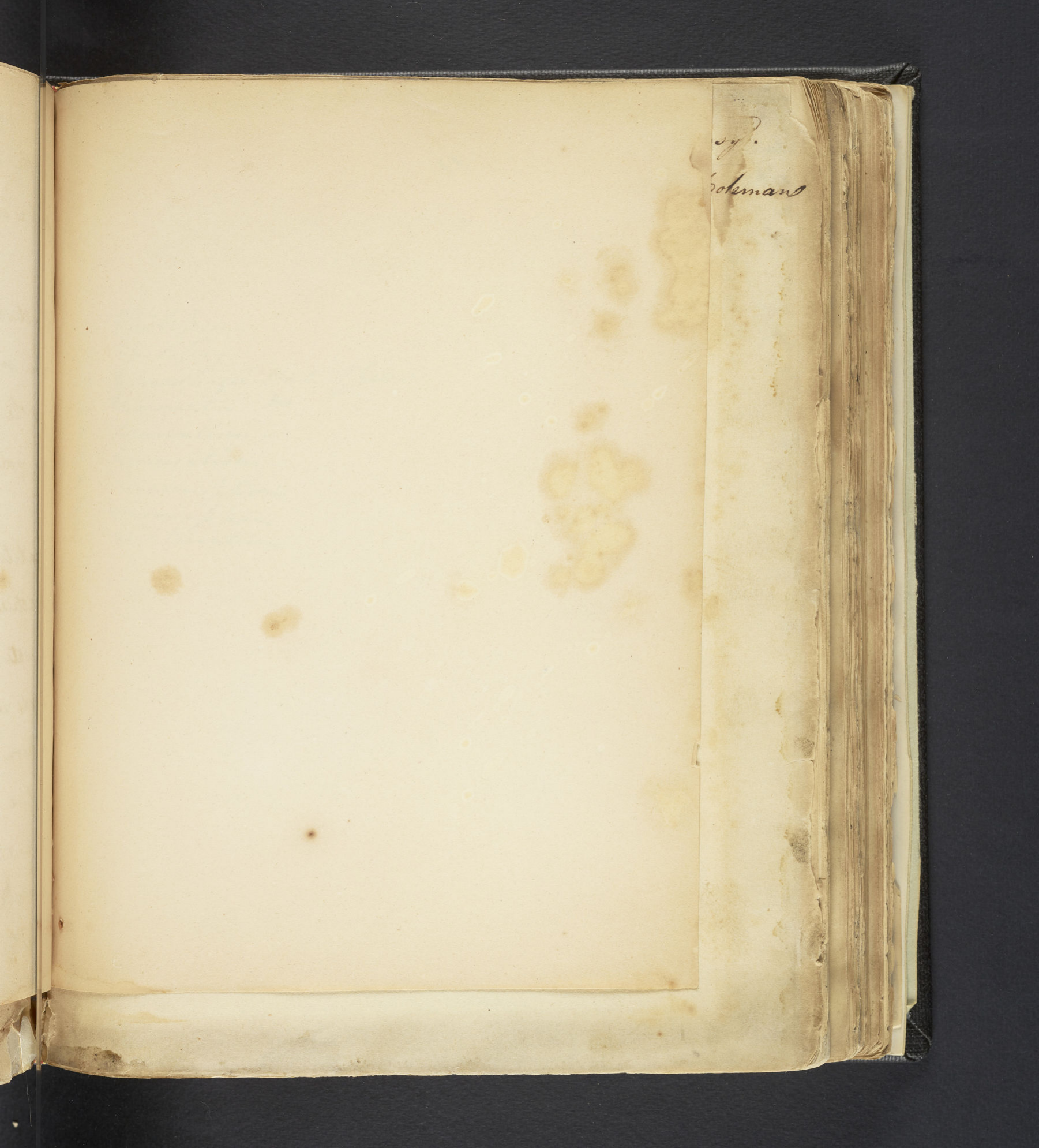
of the importance of the subject demands, such as it is, I submit it to your consideration.

I cannot leave this University by concluding this Essay, without returning you my sincere and unfeigned thanks, for the information which I have received at your hands.

But how shall I express my gratitude to the Professor of the Theory and Practice of Medicine, to whose public and private Instruction I am so much indebted? Words would give but a faint Idea of the return that I would make him. Let my future conduct show my gratitude and attachment to the discoverer and promulgator of the Doctrine of the Unity of Disease.



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